

U.S. Patent Application Serial No. 10/028,359
Response filed March 10, 2005
Reply to OA dated November 10, 2004

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-6 (canceled).

Claim 7 (previously presented): A process for electroplating a work having a hole communicating with the outside, using an electroplating device, comprising:

inserting an anode through and disposed in the hole provided in said work and communicating with the outside;

rotating said work about its center axis by a driving roller;

supplying a plating electric current to said work;

providing said driving roller with a spacer to set adjacent works to be spaced a distance apart from each other and treating simultaneously a plurality of said works set such that they are spaced a distance apart from each other by the spacer; and

depositing a positive electrode plate outside the outer surface of said work, wherein said driving roller supplies the plating electric current to said work.

Claim 8 (original): A process for electroplating a work according to claim 7, wherein said work having the hole communicating with the outside is a ring-shaped work.

U.S. Patent Application Serial No. 10/028,359
Response filed March 10, 2005
Reply to OA dated November 10, 2004

Claim 9 (original): A process for electroplating a work according to claim 8, wherein said ring-shaped work is a ring-shaped bonded magnet.

Claims 10-11 (canceled).

Claim 12 (previously presented): A process for electroplating a work according to claim 15, wherein said work having the hole communicating with the outside is a ring-shaped work.

Claim 13 (previously presented): A process for electroplating a work according to claim 12, wherein said ring-shaped work is a ring-shaped bonded magnet.

Claim 14 (previously presented): The process for electroplating a work according to claim 7, further including at least one follower roller in parallel with the driving roller and contacting said work during rotation.

Claim 15 (previously presented): A process for electroplating a work having a hole communicating with the outside, using an electroplating device, comprising:

inserting an anode through and disposed in the hole provided in said work and communicating with the outside;

U.S. Patent Application Serial No. 10/028,359
Response filed March 10, 2005
Reply to OA dated November 10, 2004

rotating said work about its center axis by a driving roller, wherein at least one follower roller in parallel with the driving roller contacts said work during rotation;

supplying a plating electric current to said work;

providing at least one of said driving roller and said at least one follower roller with a spacer to set adjacent works to be spaced a distance apart from each other and treating simultaneously a plurality of said works set such that they are spaced a distance apart from each other by the spacer; and

depositing a positive electrode plate outside the outer surface of said work, wherein said at least one follower roller supplies the plating electric current to said work.

Claim 16 (previously presented): A process for electroplating a work having a hole communicating with the outside, using an electroplating device, comprising:

inserting an anode through and disposed in the hole provided in said work and communicating with the outside;

rotating said work about its center axis by a driving roller which is made of metal and adapted to abut against an outer surface of said work to support said work during rotation of said work;

providing a follower roller adapted to abut against the outer surface of said work to support said work during rotation of said work;

supplying a plating electric current to said work;

U.S. Patent Application Serial No. 10/028,359
Response filed March 10, 2005
Reply to OA dated November 10, 2004

providing at least one of said driving roller and said follower roller with a spacer to set adjacent works to be spaced a distance apart from each other and treating simultaneously a plurality of said works set such that they are spaced a distance apart from each other by the spacer; and depositing a positive electrode plate outside the outer surface of said work, wherein said driving roller supplies the plating electric current to said work.

Claim 17 (previously presented): The process for electroplating a work according to claim 15,

wherein said driving roller is adapted to abut against an outer surface of said work to support said work during the rotating step, and

wherein said follower roller is made of metal and is adapted to abut against the outer surface of said work to support said work.